[REGION NAME] [YEAR] ESI HYDRO Polygons, Lines

Office of Response and Restoration

Data Set (DS) | ID: 47475 | Draft

Created: 2017-09-25 | Last Modified: 2019-09-06

Parent: ESI Metadata Templates

Project (PRJ) | ID: 46647

ID: 47475

Data Set (DS)

*** Discovery**

• First Pass

» Metadata Rubric

Item Identification

*** » Title**	[REGION NAME] [YEAR] ESI HYDRO Polygons, Lines
Short Name	[REGION NAME] [YEAR] ESI HYDRO Polygons, Lines
*** Status**	Completed
Creation Date	
Revision Date	
• Publication Date	1111-11
*** » Abstract**	The feature classes HYDROL and HYDROP contain vector lines and polygons representing the coastal shoreline and hydrography used in the creation of the Environmental Sensitivity Index (ESI) for [NAME OF STUDY AREA]. The HYDROP (hydrography polygons) layer delineates the shoreline, and identifies areas as either Land or Water. The HYDROL (hydrography lines) layer includes features that are not captured in the HYDROP data layer, such as piers, breakwaters, and inland rivers and creeks. As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also the HYDROP (Hydrography Polygons) data layer for additional shoreline/hydrography information.
*** Purpose**	The ESI data are intended to provide baseline environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources. The ESI data may be appropriate for many other coastal management efforts, though the original intent should be kept in mind.
Notes	[THIS FIELD IS FOR INTERNAL NOTES AS NEEDED. IT WILL NOT BE VIEWABLE IN THE PUBLIC METADATA RECORD.]
Other Citation Details	Prepared by [FULL TITLE OF ESI CONTRACTOR, PHYSICAL LOCATION] for NOAA National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington
• Supplemental Information	[ENTER ADDITIONAL INFORMATION AS NEEDED]

DOI (Digital Object Identifier)	
DOI Registration Authority	
DOI Issue Date	

Keywords

Theme Keywords

Thesaurus	Keyword
Global Change Master Directory (GCMD) Science Keywords	Earth Science > Human Dimensions > Environmental Impacts > Oil Spills
Global Change Master Directory (GCMD) Science Keywords	Earth Science > Land Surface > Geomorphic Landforms/Processes > Coastal Landforms > Shorelines
Global Change Master Directory (GCMD) Science Keywords	Earth Science > Oceans > Coastal Processes > Shorelines
ISO 19115 Topic Category	biota
ISO 19115 Topic Category	environment
None	Coastal resources
None	Coastal Zone Management
None	Environmental Monitoring
None	ESI
None	Hydrography
None	Oil spill planning
None	Sensitivity maps
None	Shoreline

Temporal Keywords

Thesaurus	Keyword

* Spatial Keywords

Thesaurus	Keyword
Global Change Master Directory (GCMD) Location Keywords	Continent > North America > United States Of America > [NAME OF STATE]
Global Change Master Directory (GCMD) Location Keywords	Ocean > [INSERT APPROPRIATE GCMD KEYWORD STRING]
None	[INCLUDE MAJOR LAND/WATER BODIES]

Stratum Keywords

Thesaurus	Keyword

Instrument Keywords

Thesaurus	Keyword

Platform Keywords

Thesaurus	Keyword

Physical Location

• » Organization	Office of Response and Restoration
• » City	Seattle
• »	WA

State/Province	
• Country	USA
• » Location Description	

Data Set Information

*** Data Set Scope Code**	Data Set
• Data Set Type	GIS Files
• Maintenance Frequency	As Needed
Maintenance Note	Data content is considered static once published. However, if issues with the Geodatabase linkages or table contents are identified, the Geodatabase and/or the associated Map Document may be updated. Assure most current data is being used by downloading from https://response.restoration.noaa.gov/esi_download and/or comparing modification dates provided at this site.
» Data Presentation Form	Map (digital)
• Entity Attribute Overview	In addition to the geographic data layers and their attribute tables, an associated data table, SOURCES, is used to store the source data information in the ESI data structure. The geographic data layers containing resource information (in this case, HYDROL; HYDROP does not link to the SOURCE table) are linked to the SOURCES table using the SOURCE_ID. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure. The SOURCES data table is described in detail in this document as an Entity or "Child Item". See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.
Entity Attribute Detail Citation	Environmental Sensitivity Index Guidelines, Version 4.0 (Petersen, J., et al. 2019)
Entity Attribute Detail URL	https://response.restoration.noaa.gov/esi_guidelines
Distribution Liability	Although these data have been processed and used successfully on a computer system at the National Oceanic and Atmospheric Administration (NOAA), no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format. If problems are encountered in downloading the ESI data or with file corruption, contact NOAA (see Distributor). These data represent a snapshot in time and temporal changes may have occurred. The data are not intended to include all biological or human-use resources present in an area; they focus on species and resources particularly sensitive to oiling. In the event of a spill, they should be used for a first assessment only. The data providers are the experts with regard to individual resources. They should be contacted to confirm if more current data exist or if in-depth information is needed about a particular resource.
Data Set Credit	This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington [, ADD IN ADDITIONAL FINAL CONTRIBUTORS IF APPLICABLE].
» Instrument	

(Deprecated)	
» Platform (Deprecated)	
» Physical Collection / Fishing Gear (Deprecated)	

Support Roles

» At least one Distributor Org, one Metadata Contact, one Point of Contact, and one Data Steward should be listed.

*** » Support Role**	Data Steward
*** » Date Effective From**	0000
Date Effective To	
Position	ESI Program Manager
Address	7600 Sand Point Way NE Seattle, WA 98115
Email Address	orr.esi@noaa.gov
Phone	
Fax	
Mobile	
URL	
Business Hours	
Contact Instructions	

*** » Support Role**	Distributor
*** » Date Effective From**	0000
Date Effective To	
Organization	Office of Response and Restoration (ORR)
Address	1305 East-West Highway Silver Spring, MD 20910
Email Address	
Phone	
Fax	
Mobile	

URL	http://response.restoration.noaa.gov/
Business Hours	
Contact Instructions	

*** » Support Role**	Metadata Contact
*** » Date Effective From**	0000
Date Effective To	
Position	ESI Program Manager
Address	7600 Sand Point Way NE Seattle, WA 98115
Email Address	orr.esi@noaa.gov
Phone	
Fax	
Mobile	
URL	
Business Hours	
Contact Instructions	

*** » Support Role**	Point of Contact
*** » Date Effective From**	0000
Date Effective To	
Position	ESI Program Manager
Address	7600 Sand Point Way NE Seattle, WA 98115
Email Address	orr.esi@noaa.gov
Phone	
Fax	
Mobile	
URL	
Business Hours	
Contact	

Instructions	

*** » Support Role**	
*** » Date Effective From**	
Date Effective To	
*** » Contact**	
*** Contact Instructions**	

*** » Support Role**	
*** » Date Effective From**	
Date Effective To	
*** » Contact**	
*** Contact Instructions**	

*** » Support Role**	
*** » Date Effective From**	
Date Effective To	
*** » Contact**	
*** Contact Instructions**	

Extents

Currentness Reference	Publication Date

Extent Group 1

Extent Description	This reflects the extent of all land and water features included in the overall ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

Extent Group 1 / Geographic Area 1

*** » W° Bound**	-126

*** » E° Bound**	-65
*** » N° Bound**	50
*** » S° Bound**	23
*** » Description**	[REVISE LAT/LON BOUNDS OF ESI STUDY AREA (EQUIVALENT TO THE EXTENT OF THE HYDRO POLY LAYER INCLUDING OFFSHORE WATERS), AND ADD DESCRIPTIVE TEXT AS NEEDED]

Extent Group 1 / Vertical Extent

EPSG Code	
Vertical Minimum	
Vertical Maximum	

Extent Group 1 / Time Frame 1

*** » Time Frame Type**	Range
*** » Start**	-0002
End	0001
Alternate Start As Of Info	
Alternate End As Of Info	
Description	[TIME FRAME TYPE = RANGE, STARTING WITH ESI PROJECT START YEAR, AND ENDING WITH ESI ATLAS PUBLICATION YEAR (YYYY). ADD DESCRIPTIVE TEXT AS NEEDED]

Spatial Information

Spatial Resolution

Angular Distance	
Angular Distance Units	
Horizontal Distance	
Horizontal Distance Units	
Vertical Distance	
Vertical Distance Units	
Equivalent Scale	

Denominator	
Level of Detail Description	[NOTE: IN "VECTOR REPRESENTATION" SECTION BELOW, TOPOLOGY LEVEL IS CONSIDERED "Geometry Only", POLYGONS ARE CONSIDERED AS "Complex Objects", LINES ARE CONSIDERED AS "Curve Objects", AND POINTS ARE CONSIDERED AS "Point Objects". ONLY THE OBJECT TYPES IN THE FEATURE DATA SET SHOULD BE DOCUMENTED. THE COUNTS OF EACH TYPE OF OBJECT IN THE FEATURE DATA SET SHOULD BE RECORDED (1 TO N).]

Spatial Representation

Grid Representation Used?	No
Vector Representation Used?	Yes
Text / Table Representation Used?	Yes
TIN Representation Used?	No
Stereo Model Representation Used?	No
Video Representation Used?	No

Grid Representation

Dimension Count	
Cell Geometry	
Transformation Parameter Available?	

Axis Dimension

Dimension Type	
Size	
Resolution	
Resolution Units	
Resolution Type	
Description	

Axis Dimension

Dimension Type	
Size	
Resolution	
Resolution Units	
Resolution Type	
Description	

Vector Representation

Topology Level	Geometry Only
Complex Object Present?	Yes
Complex Object Count	1
Composite Object Present?	No
Composite Object Count	
Curve Object Present?	Yes
Curve Object Count	1
Point Object Present?	No
Point Object Count	
Solid Object Present?	No
Solid Object Count	
Surface Object Present?	No
Surface Object Count	

Vector Representation

Topology Level	

Complex Object Present?	
Complex Object Count	
Composite Object Present?	
Composite Object Count	
Curve Object Present?	
Curve Object Count	
Point Object Present?	
Point Object Count	
Solid Object Present?	
Solid Object Count	
Surface Object Present?	
Surface Object Count	

Reference Systems

Reference System

EPSG Code	EPSG:4269

Horizontal Resolution

Horizontal Encoding Method	
Latitude Resolution	
Longitude Resolution	
Coordinate X Resolution	
Coordinate Y Resolution	
Row Resolution	

Column Resolution	
Horizontal Units	
Distance Resolution	
Distance Units	
Bearing Resolution	
Bearing Units	
Reference Direction	
Reference Meridian	

Vertical Resolution

Vertical Encoding Method	
Vertical Resolution	
Vertical Units	

Reference System

EPSG Code	

Horizontal Resolution

Horizontal Encoding Method	
Latitude Resolution	
Longitude Resolution	
Coordinate X Resolution	
Coordinate Y Resolution	
Row Resolution	
Column Resolution	
Horizontal Units	

Distance Resolution	
Distance Units	
Bearing Resolution	
Bearing Units	
Reference Direction	
Reference Meridian	

Vertical Resolution

Vertical Encoding Method	
Vertical Resolution	
Vertical Units	

Access Information

*** » Security Class**	Unclassified
*** Security Classification System**	
Security Handling Description	
• Data Access Policy	
» Data Access Procedure	Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).
• » Data Access Constraints	None
• Data Use Constraints	DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range

	of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgement of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.
Metadata Access Constraints	None
Metadata Use Constraints	None

Distribution Information

Start Date	0000
End Date	Present
» Download URL	https://response.restoration.noaa.gov/esi_download
Distributor	Office of Response and Restoration (ORR) (0001 - Present)
File Name	[e.g., NorthCarolina_2016_GDB.zip]
Description	This feature class is part of the downloadable Esri Arc Geodatabase.
File Date/Time	
File Type	Arc Geodatabase
File Size	[SIZE ZIPPED GEODATABASE FILE]
Application Version	
Compression	Zip
Review Status	

Start Date	
End Date	
» Download URL	
Distributor	
File Name	
Description	
File Date/Time	
File Type	
FGDC Content	

Type	
File Size	
Application Version	
Compression	
Review Status	

Start Date	
End Date	
» Download URL	
Distributor	
File Name	
Description	
File Date/Time	
File Type	
FGDC Content Type	
File Size	
Application Version	
Compression	
Review Status	

Start Date	
End Date	
» Download URL	
Distributor	
File Name	
Description	
File Date/Time	
File Type	
FGDC Content Type	

File Size	
Application Version	
Compression	
Review Status	

URLs

URL	https://response.restoration.noaa.gov/esi
Name	ESI Overview
URL Type	Online Resource
File Resource Format	html
Description	Overview of ESI data content and uses.

URL	https://response.restoration.noaa.gov/maps-and-spatial-data/esi-guidelines.html
Name	ESI Guidelines
URL Type	Online Resource
File Resource Format	PDF
Description	Guidelines for developing ESI data content and overview of ESI data structure. Useful for data collectors and users requiring more in depth information on the ESI process.

URL	https://response.restoration.noaa.gov/sites/default/files/ESI-Browse-Graphic.pdf
Name	ESI Browse Graphic
URL Type	Browse Graphic
File Resource Format	pdf
Description	ESI Browse Graphic depicts the relationships between the spatial data layers and the attribute data tables for an ESI geodatabase.

URL	
Name	
URL Type	
File Resource Format	

Description	

URL	
Name	
URL Type	
File Resource Format	
Description	

URL	
Name	
URL Type	
File Resource Format	
Description	

Activity Log

Activity Time	2017
Activity Type	[ADD METADATA ACTIVITY]
Responsible Party	
Description	[ADD DESCRIPTION OF METADATA ACTIVITY]

Activity Time	
Activity Type	
Responsible Party	
Description	

Activity Time	

Activity Type	
Responsible Party	
Description	

Activity Time	
Activity Type	
Responsible Party	
Description	

Issues

Issue Date	
Author	
Issue	

Issue Date	
Author	
Issue	

Issue Date	
Author	
Issue	

Technical Environment

Description	The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4(R) and SQL SERVER(R) (version 2005). The hardware configuration is PCs with Windows Operating System 7. [REVISE OR ADD DETAILS AS NEEDED]

Data Quality

Representativeness	
Accuracy	A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.
Analytical Accuracy	
Horizontal Positional Accuracy	
Vertical Positional Accuracy	
Quantitation Limits	
Bias	
Comparability	
Completeness Measure	
Precision	
Analytical Precision	
Field Precision	
Sensitivity	

Detection Limit	
Completeness Report	These data represent linear hydrography and land/water polygons for [STUDY AREA] .
Conceptual Consistency	A multi-stage error checking process, described in the above Attribute Accuracy Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, before the complete Geodatabase and metadata are created. After the data are delivered to NOAA, they are again subjected to a several consistency checks, and processed into the final delivery format.
» Quality Control Procedures Employed	

Data Management

» Have Resources for Management of these Data Been Identified?	
» Approximate Percentage of Budget for these Data Devoted to Data Management	
» Do these Data Comply with the Data Access Directive?	
» Is Access to the Data Limited Based on an Approved Waiver?	
» If Distributor (Data Hosting Service) is Needed, Please Indicate	
» Approximate Delay Between Data Collection and Dissemination	
» If Delay is	

Longer than Latency of Automated Processing, Indicate Under What Authority Data Access is Delayed	
» Actual or Planned Long-Term Data Archive Location	
» If World Data Center or Other, Specify	
» If To Be Determined, Unable to Archive, or No Archiving Intended, Explain	
» Approximate Delay Between Data Collection and Archiving	
» How Will the Data Be Protected from Accidental or Malicious Modification or Deletion Prior to Receipt by the Archive?	

Lineage

» Lineage Statement	[PROVIDE OVERVIEW OF LINEAGE AS NEEDED TO SUPPLEMENT THE DETAILED DESCRIPTION OF SOURCES AND PROCESS STEPS] [NOTE: The Sources in the metadata record can be taken from the SOURCES table in the Geodatabase, by selecting and referencing only the sources applying to a specific ESI Element. A few representative sources and process steps are provided below, for guidance only.]

Sources

Citation Title	[SOURCE TITLE]
Contact Role Type	
Contact Type	

Contact Name	[ORIGINATOR/PUBLISHER]
Publish Date	
Extent Type	
Extent Start Date/Time	
Extent End Date/Time	
Scale Denominator	
Citation URL	
Citation URL Name	
Citation URL Description	
Source Contribution	[BRIEFLY DESCRIBE HOW SOURCE WAS USED]

Citation Title	Continually Updated Shoreline Product (CUSP) (1:24,000)
Contact Role Type	Originator
Contact Type	Organization
Contact Name	National Geodetic Survey, NGS
Publish Date	2015-01-01
Extent Type	Range
Extent Start Date/Time	0000
Extent End Date/Time	0001
Scale Denominator	24000
Citation URL	http://www.ngs.noaa.gov/RSD/shoredata/NGS_Shoreline_Products.htm
Citation URL Name	
Citation URL Description	
Source Contribution	[BRIEFLY DESCRIBE HOW SOURCE WAS USED]

Citation Title	National Hydrography Dataset (NHD) (1:12,000/1:24,000)
Contact Role Type	Originator
Contact Type	Organization
Contact Name	U.S. Geological Survey (USGS), U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture Forest Service (USDAFS)
Publish Date	2014-01-01
Extent Type	Range
Extent Start Date/Time	0000
Extent End Date/Time	0001
Scale Denominator	24000
Citation URL	ftp://nhdftp.usgs.gov/DataSets/Staged/States/FileGDB/HighResolution/
Citation URL Name	
Citation URL Description	
Source Contribution	[BRIEFLY DESCRIBE HOW SOURCE WAS USED]

Citation Title	
Contact Role Type	
Contact Type	
Contact Name	
Publish Date	
Extent Type	
Extent Start Date/Time	
Extent End Date/Time	
Citation URL	
Citation URL Name	

Citation URL Description	
Scale Denominator	

Citation Title	
Contact Role Type	
Contact Type	
Contact Name	
Publish Date	
Extent Type	
Extent Start Date/Time	
Extent End Date/Time	
Citation URL	
Citation URL Name	
Citation URL Description	
Scale Denominator	

Citation Title	
Contact Role Type	
Contact Type	
Contact Name	
Publish Date	
Extent Type	
Extent Start Date/Time	
Extent End Date/Time	
Citation URL	
Citation URL Name	

Citation URL Description	
Scale Denominator	

Process Steps

Process Step Number	1
» Description	[DESCRIBE EACH PROCESSING STEP FOR THIS FEATURE CLASS, USING AS MANY STEPS AND PROVIDING AS MUCH DETAIL AS NEEDED. A SOURCE MAY BE CITED FOR EACH PROCESSING STEP. INPUT CORRECT PROCESS DATE/TIME FOR EACH STEP] [EXAMPLE 1: The shoreline locations and features were derived from the integration of the following digital data: [CITE DATA SOURCES]].
Process Date/Time	
Process Contact	Office of Response and Restoration (ORR)
Phone (Voice)	
Email Address	
Source	[SOURCE TITLE]

Process Step Number	2
» Description	[EXAMPLE 2: The HYDROL data layer contains select lines also captured in the ESIL data layer. The HYDROL layer contains only piers, breakwaters, groins, hydrographic centerlines, and the area of interest (AOI) extent of the atlas. All piers, breakwaters, and groins 10 meters (m) or greater in length were manually digitized at approximately 1:1,000 scale using the ortho-rectified aerial imagery (prioritized by currency, spectral resolution, and tidal coordination where available). Hydrographic centerlines were found primarily in the NHD dataset. The vector source data for each HYDROL feature were recorded in the [SOURCE_ID] field in the attribute table. After the initial shoreline classification, the data were checked for logical consistency errors and re-checked for topology errors. The ESI, biology, and human-use data were compiled into the standard ESI digital data format. A QA/QC period for NOAA and participating resource experts was conducted and, as needed, edits to the HYDROL data layer were made based on the recommendations of the experts, and final hardcopy maps and digital data were created.]
Process Date/Time	
Process Contact	ESI Program Manager
Phone (Voice)	
Email Address	orr.esi@noaa.gov
Source	[SOURCE TITLE]

Process Step Number	
» Description	

Process Date/Time	
Process Contact	
Phone (Voice)	
Email Address	
Source	

Process Step Number	
» Description	
Process Date/Time	
Process Contact	
Phone (Voice)	
Email Address	
Source	

Process Step Number	
» Description	
Process Date/Time	
Process Contact	
Phone (Voice)	
Email Address	
Source	

Acquisition Information

Instruments

Instrument Unavailable Reason	
Identifier	
Docucomp UUID	

Instrument / Gear	
Instrument Type	
Description	

Identifier	
Docucomp UUID	
Instrument / Gear	
Instrument Type	
Description	

Identifier	
Docucomp UUID	
Instrument / Gear	
Instrument Type	
Description	

Platforms

Platform Unavailable Reason	

Identifier	
Docucomp UUID	
Description	

Mounted Instruments

Identifier	
Identifier	
Identifier	

Identifier	
Docucomp UUID	
Description	

Mounted Instruments

Identifier	
Identifier	
Identifier	

Identifier	
Docucomp UUID	
Description	

Mounted Instruments

Identifier	
Identifier	
Identifier	

FAQs

Date	
Author	
Question	
Answer	

Child Items

Rubric scores updated every 15m

Score	Type	Title
	Entity (ENT)	**HYDROL**
	Entity (ENT)	**HYDROP**

	Entity (ENT)	SOURCES

Related Items

Item Type	Relationship Type	Title

Catalog Details

Catalog Item ID	47475
Metadata Record Created By	David Moe Nelson
Metadata Record Created	2017-09-25 12:00+0000
Metadata Record Last Modified By	Jill Petersen
» Metadata Record Last Modified	2019-09-06 17:21+0000
Metadata Record Published	
Owner Org	ORR
Metadata Publication Status	Never Published
Do Not Publish?	N
Metadata Workflow State	Draft
Metadata Next Review Date	